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ABSTRACT

This policy paper examines the products, services, and innovations that a fully competitive marketplace could generate if the government loosened its grip on education, noting that the failure of government-run schools to prepare students for the rigors of the modern economy is a pressing policy problem as well as an opportunity for the private sector. The paper examines for profit education in kindergarten through 12th grade, focusing on technologies, products, and services. It also discusses postsecondary and adult education, emphasizing postsecondary education providers and distance learning. After examining policy implications, the paper presents answers for critics regarding student achievement, parental decisions (school choice), accountability, and markets and equity. It concludes by noting the important ways in which a fully competitive education marketplace would differ from the current system (e.g., "edupreneurs" would provide education services designed to prepare students to participate effectively in the new economy, higher education would become more accessible and affordable to all people, and a consumer-driven system would quickly weed out substandard schools and products). An appendix presents tables of for-profit education providers. (SM)

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Policy Analysis

No. 386 November 20, 2000

Routing

ED 448 231

"Edupreneurs"

A Survey of For-Profit Education

by Carrie Lips

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Executive Summary

Education companies, or "edupreneurs," are entering the education marketplace in droves with creative, cost efficient products and services for students of all ages. This rapidly expanding industry, which constitutes approximately 10 percent of the $740 billion education market, demonstrates that private enterprises, even when competing against a monopolistic system, can deliver a wide range of affordable high-quality educational services. This study provides a glimpse of the products, services, and innovations that a fully competitive marketplace could generate if the government's stranglehold on education were loosened.

For example, Scientific Learning is developing products to help children to overcome speech impediments. DeVry and the Apollo Group are making postsecondary education more convenient and affordable, thus reducing some of the barriers that have traditionally prevented adults from pursuing higher degrees. Established companies such as Kaplan, which traditionally prepared high school students for standardized tests, are expanding their educational services internationally, across age groups, and through new media.

Although the marketplace for education services and products is strong on the margins, the structure of the American educational system creates considerable obstacles for companies that would like to offer complete kindergarten through 12th grade services: entrepreneurs attempting to open schools face regulatory barriers and competition from "free" government schools supported by state funds.

Policymakers interested in improving America's education system should eliminate financial biases against edupreneurs by adopting policies, such as tax cuts and universal tuition tax credits, that would return education purchasing power to individuals. Such policies would begin to loosen the government's monopoly on education and allow the natural growth of a vibrant education marketplace.

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"Edupreneurs" are developing innovative products and services to fill the vacuum left by government-run schools.

Introduction

The failure of government-run schools to prepare students for the rigors of the modern economy is a pressing policy problem, but it is also an opportunity for the private sector. Analysts for Merrill Lynch explain:

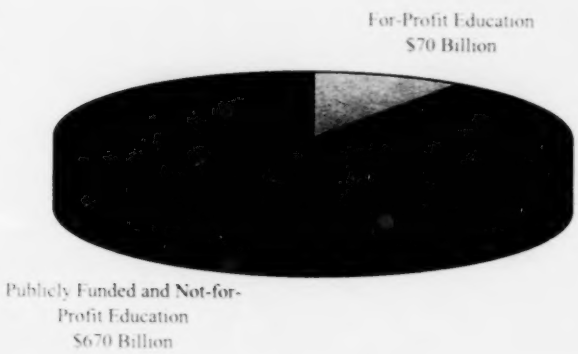
> The education needs of the knowledge economy, contrasted with the current system's inability to fill those needs provide innovative companies with open-ended opportunities for growth. The classic "big investment opportunity" is a company that has a solution to a problem; the more significant the problem, the larger the investment potential. There is not, in our view, a bigger problem in the U.S. today than the need to better educate our populace and hence, we think the investment potential in this sector is tremendous.[1]

Today "edupreneurs" are seizing that opportunity and developing innovative products and services to fill the vacuum left by government-run schools. Although the for-profit sector of the education industry is small compared with the government-run sector, it is growing.

As Figure 1 shows, the for-profit education market is approximately $70 billion, or approximately 10 percent of the $740 billion education market.[2] Overall, Merrill Lynch estimates that the for-profit education market will grow at a rate of 13 percent per year.[3]

Many factors have contributed to and will continue to contribute to that growth, including (1) businesses' demands for a more highly educated workforce; (2) consumers' demand for retraining to keep pace with the evolving workplace; (3) parents' demands for alternatives to government-run schools; and (4) an expanding market spurred by policy reforms of the 1990s, particularly those that have encouraged the growth of charter schools and private schools.

Figure 1
Market Share of For-Profit Education



Source: Michael T. Moe, Kathleen Bailey, and Rhoda Lau, *The Book of Knowledge: Investing in the Growing Education and Training Industry*, Merrill Lynch & Co., Global Securities Research & Economics Group, Global Fundamental Equity Research Department, Report 1400, April 9, 1999, p. 25.

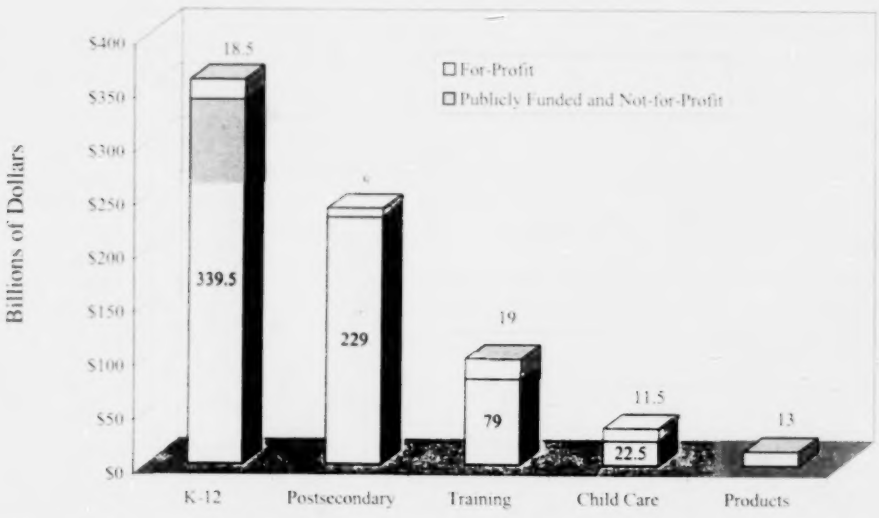
The education market can be divided into five major submarkets: kindergarten through 12th grade (K–12), early education and child care, postsecondary education, corporate and government training, and consumer products and services. As Figure 2 shows, the size of the for-profit sector varies by submarket. For instance, while the for-profit industry accounts for the entire $13 billion products and services market, it receives only 5 percent of the total dollars spent on K–12 education.

Private-sector companies are becoming involved in all aspects of K–12 education, from managing K–12 schools and creating teacher-training programs to developing textbooks and supplemental learning materials, but K–12 education is nonetheless the most difficult sector of the education industry for companies to enter. Government-funded competition and regulations make it difficult for companies to make a profit. Those obstacles increase risk for potential investors, thereby depressing the amount of capital that would otherwise be available to edupreneurs. However, as states continue to provide alternatives to traditional government-run schools through charter schools, voucher programs, and tax credits, the opportunities for edupreneurs and the ease of entry into this market should increase. For instance, Merrill Lynch estimates that, in 10 years, 10 percent of all publicly funded K–12 schools will be privately managed.[4]

This paper will provide a snapshot of the contributions of noteworthy for-profit companies in the K–12 and postsecondary education markets. Policymakers can draw two significant conclusions from this analysis: First, a private, customer-driven educational system would offer a wider range of services and products than does the government-run system. Second, the current system impedes progress in education by erecting barriers to entry to the education marketplace. Policymakers should level the playing field for edupreneurs by adopting policies, such as tax cuts, universal tuition tax credits, and vouchers, that would return spending power to

K–12 education is the most difficult sector of the education industry for companies to enter. Government-funded competition and regulations make it difficult for companies to make a profit.

Figure 2
Publicly funded and Nonprofit Education Compared to For-Profit Education (billions of dollars)



Source: Michael T. Moe, Kathleen Bailey, and Rhoda Lau, *The Book of Knowledge: Investing in the Growing Education and Training Industry*, Merrill Lynch & Co., Global Securities Research & Economics Group, Global Fundamental Equity Research Department, Report 1400, April 9, 1999, p. 23.

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individuals. Such policies would begin to loosen the government's monopoly on education and allow the natural growth of a vibrant education marketplace.

Kindergarten–12th Grade Education

Most national discussions about educational reform focus on kindergarten through 12th grade. The K-12 marketplace consists of more than 116,000 public and private schools, which served an estimated 53.5 million children in 1999[5] at a cost of approximately $360 billion.[6] Statistics and anecdotes showcasing the failure of the government-run schools to educate students adequately are commonplace:

> At fourth grade (ten years old), American children score better in reading and science than most pupils in 20 other countries, and are about average in mathematics. At eighth grade, they are still slightly better than average in math and science but fall behind in reading. By 12th grade, they are behind 95 percent of the children in other countries. The longer children stay in American schools, the worse they seem to get.[7]

The average grade that parents and the public generally give the schools in their community and in the nation at large has declined since 1974 and hovers between C and C+.

The average grade that parents and the public generally give the schools in their community and in the nation at large has declined since 1974 and hovers between C and C+.[8] At the same time, parental and public support for school choice—that is, allowing students and parents to choose a private school to attend using tax dollars—has doubled since 1991.[9] Numerous polls show that the majority of voters support this type of school choice.[10]

Dissatisfaction with public schools and support for alternatives are manifest not just in polls but in reality: witness the tremendous growth over the past decade in charter schools, publicly funded voucher programs, tuition tax credits, private scholarships, and homeschooling. For instance, in 1991 Minnesota became the first state to open a charter school.[11] Today 36 states, Puerto Rico, and the District of Columbia have laws allowing charter schools.[12] Milwaukee, Cleveland, and Florida have adopted voucher programs; Minnesota, Arizona, Iowa, and Illinois have adopted tuition tax credits. At the same time, a growing number of organizations are privately funding scholarship programs. For example, the Children's Scholarship Fund had awarded approximately $160 million in scholarships as of October 1, 1999, helping to send 40,000 children to private schools.[13] The Home School Legal Defense Fund estimates that the number of children being educated at home has been increasing at a rate of 15 percent per year since 1990; as of the 1997-98 school year, there were approximately 1.5 million homeschoolers.[14]

Despite the growing demand for alternatives to state-run education, government still controls most of the money spent on education in the United States. Of the $740 billion the United States spends on education, approximately 75 percent is collected, controlled, and spent by government.[15] Government-run elementary and high schools, which teach approximately 88 percent of U.S. students, enjoy near-monopoly status.[16]

Although researchers offer many explanations[17] for the failure of public schools, the lack of competition appears to be a fundamental cause of the system's stagnation. Lewis Perelman, author of *School's Out*, puts it this way: "In essence, the public school is America's collective farm. Innovation and productivity are lacking in American education for largely the same reasons they were scarce in Soviet agriculture: absence of competitive, market forces."[18]

Edupreneurs are attempting to address the need for improving K-12 education both by working within and by competing against the state-run schools with a variety of products and services. Some companies are

restructuring or creating schools, and others offer technologies that can improve schools, retrain teachers, or facilitate education at home. The following is an overview of for-profit schools and the educational products and services they offer in the K–12 market.

For-Profit Schools

The growth of charter schools and the adoption of voucher programs and tuition tax credits are providing companies with more opportunities to become involved in administering and opening schools. Although for-profit schools currently serve a relatively small number of students (approximately 100,000[19] students at 230 schools),[20] for-profit companies are awarded roughly 10 percent of all charters.[21] Therefore, as states increase the number of available charters and adopt more voucher and tuition tax credit programs, the number of schools administered and opened by education companies will likely increase.

Parents' motives for seeking alternative schools vary and are not simply a function of wanting better academic offerings. William G. Howell and Paul E. Peterson of the Harvard Program on Education Policy and Governance studied the decisionmaking criteria used by parents with children participating in a voucher program in Dayton, Ohio, and found that, in addition to academic quality, parents considered teacher quality, discipline, school safety, and religious instruction important.[22] Other studies conducted on choice programs in San Antonio, Texas, and New York City support those findings.[23]

Parents also have ideas about what their children should learn and how they should be taught—ideas that often conflict with those of government school systems. This problem is manifest in ongoing debates: Should schools adopt character education, and, if so, what values should be taught? Should schools adopt phonics or whole language instruction? What are the roles of self-esteem education, multiculturalism, and religion in schools? While government schools attempt to find one-size-fits-all solutions to those polarizing questions, for-profit schools have entered the marketplace to give parents options.

There are dozens of for-profit companies involved in school administration and ownership. They vary in the services they offer, education philosophy, curriculum, and method of instruction. However, for-profit schools share several characteristics that distinguish them from most government schools:

- A mission statement: For-profit schools clearly define their goals and philosophies, helping school employees and parents understand the purpose of the school.
- Assessment and accountability: For-profit schools and school management companies typically measure results in terms of student performance *and* parent satisfaction. They recognize that they will be held accountable if they fail to deliver on their promises, either by parents removing their children from the school or by school boards failing to renew their charters or contracts.
- Curriculum and teaching method: For-profit schools tend to adopt particular research-based curriculums and instructional methods. Schools highlight their philosophy, curriculum, and instructional methods so parents can determine whether a school's offerings are suitable for their child.

Perhaps the best-known for-profit schooling company is Edison Schools. Edison is the largest private operator of public schools, running 79 schools for roughly 38,000 students in the United States as of November 1999.[24] Twenty-four of those schools are charter schools; the other 55 schools are "contract schools," or schools that Edison operates under an agreement with the local school board.[25]

Edison Schools emphasizes the importance of technology in education. After the first year of a school's operation, Edison gives every student in second grade or above a computer and modem for home use and offers a

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program that shows parents, teachers, and students how to use computers effectively. Edison schools also have longer and more school days; Edison students spend 28 percent more time in school each year than do students in regular public schools.[26] Edison uses a reading program developed at Johns Hopkins University and a mathematics program from the University of Chicago.[27] Edison Schools may appeal to parents who view computer literacy as a priority for their children. (See Appendix, Table A.1.)

National Heritage Academies, a different sort of for-profit schooling company, manages 22 charter schools in Michigan and North Carolina and focuses on educating students to be "good citizens," as well as good students.[28] National Heritage Academies puts it this way: "The importance of heroes and a moral focus are incorporated into the curriculum, with strong emphasis placed on the uniqueness of U.S. history and on the people who shaped it."[29] National Heritage Academies encourages parental involvement in education by asking parents to pledge to be involved in their children's education and by providing "parent rooms" so parents feel welcome.

Bright Horizons Family Solutions and Nobel Learning demonstrate how responsive companies can be to customer demands for new or better services.

National Heritage Academies follows the Hirsch Core Knowledge Sequence, which emphasizes mastering fundamental skills and a "standard body of knowledge."[30] National Heritage Academies measures results by student performance and parent satisfaction. For instance, it advertises: "Test results over the past two years show that students have scored 35 percent above the national average on standardized tests measuring grade level growth."[31] In addition, National Heritage Academies highlights parent surveys that show that parents are overwhelmingly satisfied with the schools.[32] (See Appendix, Table A.2.)

A third variation in for-profit schooling is the SABIS School Network. The network consists of 22 member schools and three associate member schools around the world serving roughly 18,500 students.[33] SABIS schools are located in Jordan, Egypt, Lebanon, the United Kingdom, and other countries as well as in Massachusetts, Michigan, and Minnesota. In the United States, SABIS operates both charter and private schools. Each school is financially and administratively independent, but all schools use the SABIS educational system, called the SABIS Edge: "SABIS Edge prepares all students for success in college, fosters a love for life-long learning and develops responsible world citizenship. It blends quality education with traditional values of hard work and duty to self and others."[34]

SABIS uses information brochures on individual schools to reach out to parents of prospective students. For example, the brochure describing the International School of Minnesota, a private pre-K–12 school, emphasizes the school's global perspective and the diversity of its student body: "At ISM, one third of the students have multicultural backgrounds. . . . This focus on cultural diversity adds a unique flavor to ISM. Students quickly learn to be sensitive to the experiences of others and learn to appreciate differences as well as similarities."[35] Parents of prospective students learn that the student will begin studying another language in preschool, will be required to wear a uniform, and will be able to participate in numerous extracurricular activities. SABIS may appeal to parents who are new to the country or believe that a global perspective will be important for their child's future.

Two other education companies, Bright Horizons Family Solutions and Nobel Learning, demonstrate how responsive companies can be to customer demands for new or better services. Both companies started out as for-profit child care providers and, in both cases, parents' enthusiasm for the day-care programs led the companies to expand their services and open for-profit schools for school-aged children.

Bright Horizons Family Solutions is the nation's largest provider of employer-sponsored child care, with family centers serving 31,000 children[36] for more than 200 companies, including Boeing, DuPont, Johnson &

Johnson, Mattel, and Motorola, and the United Nations.[37] Like for-profit K–12 education companies, Bright Horizons highlights its accreditation by the National Association for the Education of Young Children and use of the "The World at Their Fingertips Program for Learning," which is based on the work of developmental theorists and educators, including Jean Piaget and Erik Erickson.[38]

Parents who were accustomed to and satisfied with Bright Horizons' early-learning facilities wanted their children to continue learning in a Bright Horizons school. In response, Bright Horizons opened a private elementary school in Bellevue, Washington, to meet parents' demands:

> We opened Chestnut Hill Academy in response to demand from parents who wanted to keep their school-age children in a Bright Horizons Family Solutions program. Chestnut Hill has an innovative design that serves working-parent families with progressive, community-oriented learning and an extensive after-school enrichment program including karate, piano, cooking, art, and science.[39]

Like Bright Horizons, Nobel Learning Communities, Inc., began as a child care provider and expanded its business to include K–12 education. Nobel Learning Communities operates 153 schools, including approximately 100 preschools, in 16 states.[40] Nobel's services include private preschools, elementary and middle schools, schools for learning-challenged students, publicly funded charter schools, corporate-sponsored schools, diagnostic and tutorial centers, and summer camps. Parents can learn about Nobel's various programs through Nobel's informational brochures and on its Web sites. For example, one brochure includes Nobel's mission statement, vision, and general educational curriculum.[41] Parents whose child will be entering first grade will find that they can expect their child to be learning addition and subtraction through 18 and place values up to 100 and to be introduced to geometry, fractions, telling time, and problem solving in the mathematics program.[42]

Nobel also offers brochures on some individual schools and programs. For example, a parent of a child suffering from dyslexia, attention deficit disorder, or other learning disabilities can review information about the Paladin Academies. There are eight stand-alone Paladin Academies, and the Paladin program is available at many of the private schools. Parents can review the type of instruction that will be available to their child and the tutoring, summer camps, and other programs available for special-needs students.[43]

Nobel emphasizes its students' performance on the Stanford 9, a national achievement test that is administered to all K–8 Nobel students.[44] However, Nobel also recognizes that there are different goals for different students. For example, Nobel's brochure on the Houston Learning Academy, a high school that caters to students who need extra attention and may have had trouble in traditional schools, emphasizes the high graduation rate and the percentage of graduates who go on to college.[45] Nobel recognizes that high test scores are only one measure of success. As parents know, different children have different needs.

The growing demand for alternative K–12 schools presents opportunities for education companies, but there are also many obstacles. Companies attempting to start schools face large overhead: school buildings, staff, computer technology, textbooks, and other materials require a considerable initial investment. They often must contend with teachers' unions that typically oppose change in the educational system and are hostile to for-profit schools, which may make attracting qualified teachers more difficult.[46] Companies managing charter schools also face significant political risk: they depend on government funding, and shifting political winds may blow against

Nobel's services include private preschools, elementary and middle schools, schools for learning-challenged students, charter schools, corporate-sponsored schools, diagnostic and tutorial centers, and summer camps.

A customer-driven educational system would weed out substandard schools more rapidly than does the current system.

them. Charter schools are generally free from some of the regulations that public schools typically face; however, they still are limited as to the methods of student selection, and they must consider the possibility that such regulations could increase.[47] For those reasons, many for-profit schools have yet to turn a profit. Edison Schools, for instance, lost $49.4 million in the fiscal year that ended on June 30, 1999, and expects to incur losses in the future.[48]

Another for-profit school management company, TesseracT Group, Inc., which operates approximately 38 charter schools, preschools, and private schools, is also struggling financially.[49] TesseracT schools aim to provide students with a personalized educational experience, low teacher-to-student ratios, and a rigorous academic curriculum.[50] However, TesseracT has suffered financial losses of $14 million in two years, resulting in the company's being removed from the NASDAQ.[51] As of March 2000, TesseracT was contemplating a 10 percent tuition increase.[52]

Although it is beyond the scope of this paper to fully dissect the root of any company's financial difficulties, some discussion is in order. Critics of for-profit education may view TesseracT's problems as evidence that education is unprofitable and best left in the hands of government, but this company's experience provides a number of alternative conclusions. It is possible that TesseracT offers a quality product but is having difficulty competing against schools that receive government funds for their facilities and pay no taxes; the playing field is uneven.

It is also possible that TesseracT's schools are not living up to their promises. If that is the case, it is evidence of the important role the market plays in ensuring quality. If parents are dissatisfied with a school's product, then they may remove their child and the company loses the funding associated with that child. Therefore, schools that do not provide adequate service will fail. Likewise, charter schools that fail may have their charters revoked by the government. In fact, there have been several instances in which charters have been repealed when schools have failed to live up to their promises.[53]

Certainly, school boards' shutting down failing charter schools is a marked improvement. For too long, government has responded to failing schools by propping them up with more money. However, policymakers and the public should consider who should be in the position of determining whether or not a school is a "failure." School boards may have conflicting loyalties: A hypothetical example is a charter school that hires predominantly nonunion employees. The school board is likely to feel pressure to eliminate such a school. In contrast, when parents are in control, the successful education and safety of the students are likely to be the foremost consideration. A free and competitive market is the most effective and efficient way to make schools accountable and to determine the success or failure of a school.

The experience of for-profit school management companies suggests that a fully competitive education marketplace would differ from the current system in several important ways:

- Edupreneurs would likely open schools with a wide variety of curriculums, instructional methods, and education philosophies in an effort to serve and satisfy a diverse customer base. This stands in marked contrast to the government system in which schools have little ability or incentive to specialize, diversify, or cater to the different demands of parents.
- For-profit schools would give parents more opportunities than does the current government system to choose schools with academic standards and values that reflect their priorities.
- A customer-driven educational system would weed out substandard schools more rapidly than does the current system.

Technologies, Products, and Services

In 1992 Lewis Perelman, author of *School's Out* and former director of Project Learning 2001 for the Hudson Institute, hypothesized about how technology could transform the U.S. educational system:

> A technology revolution is sweeping through the U.S. and world economies that is totally transforming the social role of learning and teaching. This learning revolution already has made "the classroom teacher" as obsolete as the blacksmith shop. In its aftermath, most of what now passes for education "reform" will appear as useful to economic security in the 1990s as the Maginot Line was to military security in the 1940s.[54]

Perelman's hypothesis seems correct: new technologies, if applied correctly, could significantly enhance, facilitate, and even revolutionize education. However, developing technologies and programs that will facilitate or change the learning process requires a significant investment in research and development. The Panel on Technology under the President's Committee of Advisors on Science and Technology noted that the lack of investment in research is a serious problem facing the U.S. educational system:

> Funding levels for educational research, however, have thus far been alarmingly low. By way of illustration, whereas some 23 percent of all U.S. expenditures for prescription and non-prescription medications were applied toward pharmaceutical research in 1995, less than 0.1 percent of our nation's expenditures for elementary and secondary education in the same year were invested to determine which educational techniques actually work, and to find ways to improve them.[55]

While the government system invests next to nothing in research and development for education, for-profit companies are designing and applying new technologies to facilitate learning, measure student progress, offer expanded learning opportunities over the Internet, and train and assist teachers. The following overview provides a sampling of the types of technological research, products, and services that for-profit companies have developed to improve education.

Perhaps more than any other for-profit education company, Scientific Learning allows us to glimpse the potential for edupreneurs to bring about revolutionary change in education. Scientific Learning has developed educational software based on 25 years of brain research. The software, dubbed "glasses for the ears" and marketed under the name Fast ForWord, has been shown to dramatically improve the language and reading skills of children aged 4 through 13, particularly children who have difficulties reading and processing speech. Scientific Learning reports, "On average, children with language and reading problems make language gains of 1.5 to 2 years after 4 to 8 weeks of Fast ForWord training."[56] Scientific Learning describes the process they have developed as "computer-controlled, repetitive training exercises that automatically adapt to each user's performance to modify the manner in which the brain processes language."[57]

The benefits of Scientific Learning's programs were confirmed in a recent study in the Philadelphia public school system. Twenty-three students who risked academic failure received between 4 and 10 weeks of training. Before the training, the students tested well below average; after using Scientific Learning's programs, 70 percent of the students had moved into the average range. Moreover, the average student gained three and a half years of language skills.[58] (See Appendix, Table A.3.)

The potential for products that isolate brain processes has captured the interest of the media and researchers. Articles on the ramifications of Scientific Learning's findings and products have appeared in *Time* and *Newsweek*. *Newsweek*'s article focused on the

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importance of the findings:

> Improved learning based on neuroscience may be the first dream to be realized. Educators, for the most part, ignore (or are ignorant of) the mechanisms by which the brain changes so that it is capable of, say, deductive logic. But make no mistake: the brain capable of logic is physically different from the brain that is not. . . . With Fast ForWord, made by Scientific Learning Corp., they set about changing the brain so that it recognizes such lightning-fast phonemes.[59]

Scientific Learning is an example of how the profit motive spurs innovative research and development to the benefit of students. By funding research on how information is transmitted and processed by the human brain, companies like Scientific Learning could radically alter the way educators attempt to transmit knowledge to children and adults alike.

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Another company, Advantage Learning Systems, Inc., provides learning information systems for K–12 schools in the United States and Canada. A learning information system is computer software that drills students on their lessons and provides teachers with assessments of students' progress. Advantage Learning Systems' Accelerated Reader program consists of computer-based multiple-choice tests on literature. Quizzes are available on approximately 20,500 books appropriate to students in grades K–12, and teachers can select books that they feel will be most useful and create their own lesson plans using the computer program.[60] Advantage Learning Systems offers similar programs in math and grammar. Those programs drill students with sets of problems and offer instant feedback, highlighting and correcting the students' mistakes.

Educators receive reports on students' performance; some programs include a database that lets teachers compare a student's performance against national norms. Those reports reduce teachers' administrative duties and provide feedback that helps teachers, administrators, and parents understand which methods are successful and to determine where resources should be allocated. Independent studies conducted on the company's behalf indicate that use of the Accelerated Reader improves standardized test performance in reading.[61] (See Appendix, Table A.4.)

A third example of innovation comes from TRO Learning Inc., which has designed computer-based educational and training programs to provide adolescents and adults with problem-solving skills that are transferable to the workplace. For example, TRO Learning's Math Problem Solving program incorporates mathematical concepts into "real-life situations like building a road or growing lilies in a greenhouse."[62] TRO Learning's product line includes programs for reading, writing, language, math, science, social studies, technology, and job skills. The programs, which can be accessed on CD-ROM or over the Internet, include an initial assessment of skill level and provide feedback that tracks the student's progress.

New technologies also make it possible for students to take courses that are not offered in their own schools. Apex Learning lets students access online courses and practice tests for Advanced Placement exams, which allow students with satisfactory scores to receive credit at many colleges.[63] The online classes are available in 10 subject areas including calculus, economics, and government, and each consists of about 25 students and an AP teacher. Students have flexibility about when and how they study and can participate in online classroom discussions. They e-mail comments and assignments to their teachers and receive feedback and grades online.

Apex enrolled 150 students in a pilot test of two products in January 1999. Of those students, 50 completed the course and 32 took the AP exam.[64] More than 80 percent of those who took the exam passed it, and close

to 60 percent achieved high scores of 4 or 5.[65] Although this group is small and the results are not statistically significant, they do suggest that the course did successfully prepare students for the exam. During the 1999–2000 school year, 600 students were enrolled in Apex courses; those students came from 137 schools and 10 home schooling families in 28 states.[66]

For-profit companies are also creating programs to train teachers to use technology effectively. Apex Learning, for instance, has teacher-training programs to prepare teachers to assist students preparing for AP tests. Advantage Learning Systems conducts workshops on Reading Renaissance and Math Renaissance to teach educators how to use the company's programs. As of December 1998, an estimated 110,000 educators had attended Reading Renaissance training programs.[67] Scientific Learning also holds seminars to teach educators and speech and language professionals about developments in brain research and practical uses for the company's products.

Products offered by those for-profit companies highlight the potential for the development and application of technologies that could facilitate learning and dramatically improve the nation's skill base.

Postsecondary and Adult Education

The postsecondary education sector has become increasingly important as the need for skilled workers has grown. Already, the United States faces labor shortages in critical sectors of the economy. There are simply not enough qualified workers to fill the jobs available in high-tech industries.[68] According to a 1998 Coopers & Lybrand "Trendsetter Barometer" survey of Fortune 500 CEOs, approximately 70 percent said they face serious problems finding skilled workers.[69]

The growing demand for skilled workers has changed the composition of the postsecondary education marketplace as more adults seek additional education and training. However, providers of traditional postsecondary education have been slow to adapt to the needs of consumers of adult education:

> While adults over 25 represent nearly 50 percent of our postsecondary student population, most colleges and universities are still operating in the old education paradigm, set up to serve students age 18–22 who are looking for a general education as well as a "college experience"—football games, student unions, and fraternities or sororities. The lack of convenient education options translates to opportunity for innovative proprietary postsecondary institutions that can provide a "no nonsense" and "customer" oriented, efficient education model that is convenient, accessible, and relevant in today's world.[70]

There are several possible explanations for why existing public and nonprofit universities may be failing to respond sufficiently to the growing demand for adult education. For example, public universities' primary source of income is state governments, not tuition.[71] Since universities do not depend on tuition, administrators may be slower to respond to a growing potential client base. Economist Gary Wolfram of Hillsdale College writes: "Public institutions of higher education do not generally market themselves, and tuition policy depends on state appropriations rather than profit maximization. Much has been written about the fact that professors are not rewarded on the basis of their teaching services."[72] Many private universities also do not depend solely on student tuition for financing. For example, at the Kennedy School of Government at Harvard University, the dean often reminds students that tuition payments do not cover the cost of their education. The school draws on an endowment, built by alumni and other donors. It is likely that administrators of private universities such as Harvard respond to the demands of

The postsecondary education sector has become increasingly important as the need for skilled workers has grown.

alumni as much or more than they respond to the demands of current students. That may make change less likely.

To meet the demands of the 6.1 million adult students, for-profit companies are creating programs and services that cater to those students' lifestyles.[73] Although the for-profit segment of the postsecondary education market accounts for just $5 billion, or less than 2 percent of the total industry,[74] it is rapidly expanding and becoming increasingly important to the knowledge economy. In particular, the shortage of technology workers has led many adult students to seek additional technical training. The following is an overview of for-profit postsecondary education providers and distance-education services.

DeVry measures its results by job-placement rates. More than 90 percent of its graduates who pursue employment have a job within 180 days of graduation.

Postsecondary Education Providers

There are numerous for-profit companies providing postsecondary educational programs for adults. The subjects, degrees, and programs offered vary; however, for-profit postsecondary education providers generally differ from traditional colleges and universities in three important ways:

- Flexible, worker-friendly schedules: For-profit postsecondary institutions try to make it possible for a student to work and pursue education by scheduling classes in the evenings and during the summer.
- Job-related skills: Most programs offered by for-profit postsecondary institutions are specifically designed to help students acquire skills that will directly improve the students' career prospects. There is much less focus on liberal arts, humanities, or even basic sciences than in traditional colleges.
- Success is measured through the job market: For-profit schools attract students by emphasizing the job-placement rates of former students.

For instance, DeVry, Inc., first began offering technology training courses in radio, television, and sound systems in 1931.[75] Today DeVry offers undergraduate, graduate, and "lifelong" learning programs to 38,000 full- and part-time students on 16 campuses.[76] DeVry's students can obtain bachelor's degrees in electronics engineering technology, computer information systems, telecommunications management, accounting, technical management, and business administration.

DeVry differs from typical providers of postsecondary education in its emphasis on providing career-oriented training. DeVry contrasts its faculty with professional experience, lab sessions with modern technologies, and classes focusing on "hands-on application" with traditional programs in which professors, often without related professional experience, focus on theory.[77]

Unlike traditional postsecondary institutions, which often measure their results by the caliber of students they attract, DeVry measures its results by job-placement rates. DeVry offers an employment assistance program for its graduates and boasts that more than 90 percent of its graduates who pursue employment have a job within 180 days of graduation.[78] DeVry also structures its schedule to take into account the priorities of adult students. Courses are available at night and during the summer, making it possible for a full-time student seeking a bachelor's degree to obtain one in three years; a part-time student can obtain one in five years. (See Appendix, Table A.5.)

DeVry is only one of a growing number of companies offering adult postsecondary educational programs. On 11 campuses in the District of Columbia, Virginia, and Maryland, Strayer Education, Inc., serves 10,000 students who seek degrees in business and information technology.[79] ITT Educational Services, Inc., operates 67 technical institutes in 27 states serving roughly 25,000 students seeking skills in technology-related fields.[80]

Education Management Corporation offers associate's and bachelor's degree programs and nondegree programs in design, media arts, culinary arts, and fashion. At 18 schools in 16 cities, in 1998 Education Management served more than 21,000 stu-

dents with courses designed to help students develop the skills necessary to gain entry to various fields including graphic design, multimedia and Web design, computer animation, video production, culinary arts, interior design, industrial design, photography, and fashion marketing.[81] Like DeVry, Education Management measures success in terms of student employment: approximately 91 percent of 1998 graduates seeking employment received positions in their desired fields within six months of graduation.[82]

Those and other for-profit postsecondary institutions are changing the composition of the postsecondary marketplace by serving the needs of adults seeking new skills.

Distance Learning

New technologies are also making it easier for adults to continue their education through "distance" or "distributed" learning. Distance learning consists of educational programs that are distributed via communication technologies such as the Internet, satellite technology, and video. Those programs allow students to complete coursework without ever entering a traditional classroom or campus, which makes courses both more affordable and accessible for many workers. The U.S. Department of Education estimated that one-third of higher education institutions offered distance education courses in 1995 and another 25 percent planned to offer such courses within three years.[83] *Forbes* estimates that approximately 90,000 courses at U.S. colleges and universities are offered through some form of distance learning.[84] The International Data Corporation estimates that the number of students enrolled in distributed learning will increase from 710,000 in 1998 to 2.23 million in 2002.[85]

The University of Phoenix Online, a for-profit university run by the Apollo Group, was one of the first online degree programs offered by an accredited university. The program was first offered in 1989, and by 1999 there were approximately 10,000 students enrolled.[86] Today the University of Phoenix Online boasts roughly 13,500 students pursuing degrees online.[87]

Through the online program, students can obtain numerous degrees in a range of subjects including education, business administration, accounting, computer information systems, and nursing. Students enrolled in the online program receive assignments and instruction over the Internet. Typically, at the beginning of the week instructors send out information (which may include a lecture) on the topic of the week, the assignment (e.g., reading that is accessible through the university's electronic library or from a course textbook or a written assignment), and discussion questions. Students can participate in electronic classroom discussions, ask questions, and receive feedback online. Students turn in assignments to their instructors and receive grades and comments online.[88]

Tuition for the University of Phoenix Online is less than tuition at the average university: the cost of obtaining a bachelor's degree typically runs from $12,000 to $24,000.[89] In contrast, the National Center for Education Statistics estimates that the average cost of obtaining a bachelor's degree runs from $13,000 at public colleges to $56,000 at private colleges.[90] However, the low cost of public universities is misleading since it does not include the substantial subsidy provided by taxpayers. For example, Gary Wolfram, author of "The Threat to Independent Education: Public Subsidies and Private Colleges," estimates that in-state tuition covers only 28 percent of the costs of providing an education in a public college.[91] Therefore, the cost of a public university education is likely to be more than three times the tuition charged, or roughly $9,000 annually or $39,000 for a degree. In reality, the University of Phoenix Online has substantially lowered the cost of obtaining a bachelor's degree.

Kaplan Inc., a wholly owned subsidiary of the Washington Post Company, created Concord University School of Law, the only online law school, in the fall of 1998.[92] Concord's curriculum corresponds to the

Tuition for the University of Phoenix Online is less than tuition at the average university.

The innovative, competitive, for-profit education market stands in stark contrast to the stagnant public school system that holds almost 90 percent of the nation's children captive each day.

curriculum of American Bar Association-accredited law schools and draws from casebooks and textbooks found on typical "fixed facility" law school campuses. Concord describes a typical day as consisting of "reading and briefing cases offline; attending a professor-led chat room; discussing course work with classmates in an online study group; or, doing research using one of the electronic networks available to Concord students."[93]

Currently, more than 500 students are enrolled in Concord's juris doctor and executive J.D. programs, and Concord expected nearly 750 students in the fall of 2000.[94]

Concord University demonstrates one way in which regulations get in the way of new forms of higher education. Concord is authorized to award degrees by the Bureau of Private Post-Secondary and Vocational Education in California and is accredited by the Distance Education Training Council. Concord has also complied with the registration requirements of the California state bar. Therefore, Concord graduates can apply for admission to the California bar and, upon passing the test, are qualified to practice in California courts.[95] However, Concord is not accredited by the ABA because the ABA and state bar associations do not evaluate or accredit online legal programs:

> The standard for most fixed facility schools is accreditation by the American Bar Association (ABA). ABA accreditation allows graduates of the accredited schools to sit for the bar examination in any state. However, distance education programs do not meet the "residence study" requirement of the ABA, and therefore they are ineligible to apply for accreditation.[96]

As a result of state regulations that require that, to take the bar exam, one must have graduated from a law school accredited by the ABA, Concord University graduates can take the bar exam only in California. That makes it more difficult for Concord to attract students from elsewhere in the country.

Since ABA accreditation is not available for Concord, Concord instead highlights that it is a division of Kaplan Educational Centers and is committed to maintaining Kaplan's reputation for educational excellence. Concord also emphasizes its faculty and advisers, including legal scholars such as Arthur Miller, Bruce Bromley Professor of Law at Harvard Law School.[97]

The success of online institutions in attracting students highlights the considerable changes that technology makes possible, including challenging traditional notions of "college." Since online universities are more affordable and do not require students to spend their days on a campus, they have the potential to eliminate some of the barriers that prevent people from obtaining degrees. For example, the average age of a student at Concord is 40 years,[98] which suggests that online colleges are attracting a different clientele than does a typical university. Furthermore, the accessibility and affordability of online instruction may be particularly important to low-income individuals and people with physical limitations who traditionally have had less access to higher education.

Policy Implications

The innovative, competitive, for-profit education market stands in stark contrast to the stagnant public school system that holds almost 90 percent of the nation's children captive each day. Moving toward a market-based system holds great promise for improving the quality of education in the country. There are numerous studies that demonstrate the benefits to be had from simply allowing parents choice among public schools. Even that limited bit of empowerment has been shown to improve parents' satisfaction with the schools and raise most children's test scores.[99]

However, as Perelman concludes in *School's Out*, just providing "choice" among a

number of government-run schools and perhaps a few schools run by alternative providers is not sufficient to spur a competitive marketplace:

> "Choice" as a synonym for free markets—where consumers are free to choose and vendors are free to create and sell a variety of products and services—is undeniably essential to cure education's morbid productivity and festering irrelevance. . . . However, the need not merely for "choice" but for commercialization of education has been overlooked by most would-be reformers. We need commercial choice and competition in education first to goad technical innovation—the profit motive is essential to reward the creation and provision of productive technologies. . . . Profit-motivated competition also is necessary to provide quality control. Only markets can create the information needed to determine "what works" economically.[100]

Perelman imagines a world without "credentialism," where businesses cannot consider the educational "pedigree" of a job applicant but instead must focus on what an individual knows and can do. That mental exercise serves as a reminder of the fundamental purpose of schools:

> With diplomas no longer having economic value, the public would quickly turn its attention to what it should have been paying attention to all along: What do you need to learn to get the economic opportunities you want? And, what's the fastest, cheapest, best way to learn that?[101]

The for-profit education industry is already offering a wide range of affordable high-quality education services to help customers become knowledgeable individuals prepared to meet the challenges of the constantly changing economy.

Policymakers should pursue reforms that enable education companies to flourish and individuals to pursue further education. In particular, policymakers should consider the following reforms:

- Return education dollars to individuals through tax cuts and universal tuition tax credits. Such policies would begin to loosen the government's monopoly on education and allow the natural growth of a vibrant education marketplace.
- Level the playing field by ending subsidies to government-run universities. Those subsidies make it difficult for private postsecondary institutions to compete.
- Reduce the overall tax burden. By returning money to taxpayers, policymakers would enable more individuals to invest in their own education and more companies to invest in training their employees. Such policies would encourage research and development as more investment capital would be available to for-profit education companies and there would be a greater market for their products.

Such policies would increase educational freedom, by giving parents choice, encouraging competition, and motivating edupreneurs to invest in researching and developing more effective, efficient ways of educating individuals.

Answering the Critics

Student Achievement

> The bottom line for public education has to be student achievement, not profit for private entities. . . .[102]

Opponents of customer-driven education contend that education should be about learning, not profit. Since companies naturally are in business to make money, they will be more interested in cutting costs than in

Moving toward a market-based system holds great promise for improving the quality of education in this country.

Learning and profit are not mutually exclusive. They are inextricably linked.

achieving results. That line of reasoning is fundamentally flawed: Learning and profit are not mutually exclusive. In fact, in the case of education, they are inextricably linked. The most successful education businesses are and will continue to be those that enable students to learn the most at the lowest cost.

In virtually every sphere of life, individuals rely on competition between businesses to meet consumer demands for products and services. The competitive process ensures that businesses will work to meet consumer demands; firms that fail to satisfy customers go out of business. That "creative destruction" tends to weed out poorly conceived and poorly run businesses and cultivates innovative industry leaders. We trust that competitive process to supply us with the foods we eat, the clothes we wear, and the homes we live in. It is counterintuitive to abandon those principles when it comes to something as important as education.

Edupreneurs will have to strike a balance between being cost conscious and providing high-quality learning experiences. If they cut costs to the detriment of quality, they will lose customers. We see the forces of market selection at work today. Companies that are successfully educating their customers, like Kaplan, Inc., are prospering and expanding their services. Other companies, like TesseracT, Inc., are struggling to stay afloat. Although TesseracT's financial difficulties may be due to the difficulty of competing against a monopolistic school system and not to poor customer service, the competitive process that could wipe out TesseracT is essential to a healthy industry. That process contrasts with the system of government schools that never "go under" even when they fail, year after year, to teach children.

Although there have been some instances of charters being revoked when schools perform poorly, it is unlikely that the political system would be as efficient as the marketplace. For example, in Florida, if a school "fails" for two years straight, students in the failing school receive an "opportunity scholarship" that enables them to attend different schools. However, all of the schools that earned a grade of F in 1999 were deemed to be passing this year.[103] The Florida Department of Education cited the improvement as good news, but that improvement also raises questions about the criteria used to determine school failure and whether or not there is the political will to "fail" a school. In the case of the Florida schools, in order to avoid a grade of F, a school's test scores had to be above the minimum requirements on just one of three subjects. Parents of students in a school that squeaks by, failing two of the three subjects, may question whether this system is working or whether they would have preferred to judge for themselves whether a particular school "failed" and to have the option of selecting another school for their child.

In a market, parents would decide whether or not a school was failing their child. As children are placed in schools of their parents' choice and resources are reallocated, failing schools will be eliminated—a sure step toward improving educational services for all children.

Parental Decisions

> If the greatest handicap suffered by low-achieving students is their parents' impoverishment, poor education, lax discipline, and scant interest in education . . . is it really so ridiculous to worry that these same parents might fail to become tough, savvy, demanding education consumers the instant they obtain the right to decide which school gets their children's tuition money?[104]

Critics of customer-driven education believe that if educational choices are left up to parents, they will make poor decisions and jeopardize their children's futures. However, there is no evidence to support that claim and much evidence to the contrary.

Research on school choice experiments across the country shows that parents are perfectly capable of selecting good schools

for their children. For example, several studies of voucher programs have revealed that many students using vouchers or scholarships make academic gains as demonstrated through increased test scores. In addition, parents say they are more satisfied with the new schools on a range of measures including general satisfaction, academic standards, instructional quality, discipline, and safety.[105]

Some parents are undoubtedly more informed and active than others, but in a competitive market the least-informed consumer does not dictate the quality of available options. One need not be an expert in automobile mechanics to feel confident in purchasing a car. The existence of some knowledgeable customers forces car manufacturers to prepare their products for intense scrutiny or risk bad reputations and loss of customers. As a consequence, all consumers—even the poorly informed ones—receive higher-quality products than might exist in the absence of competition. The same dynamic would exist in educational services; the existence of a motivated set of customers would improve the range of choices available to "free riders" who had not done their homework. In that way, a customer-driven educational system will raise the quality of education for all children, not only those whose parents are deeply involved.

Observers who are skeptical about parental choice overestimate the government's ability to make smart choices on behalf of children. There are numerous examples of en masse adoption of educational fads by government schools. In the 1980s California chose to use a "whole language" philosophy of reading instead of phonics. California students' test scores on reading comprehension plummeted; faced with that evidence of the experiment's failure, the state superintendent of schools implied in an interview that the fiasco was just an honest mistake.[106] The California legislature has since mandated that teachers be trained in phonics.[107]

The push in many legislatures to mandate that all students receive phonics training is misguided. It is unlikely that there is one best method of teaching children to read—it seems reasonable to assume that some students will learn better with one method and others will do better with another. Government should not dictate instructional methods.

In an education marketplace, some parents might select schools with experimental teaching methods, but participation would be voluntary. If such schools failed to produce results, parents could easily change schools. Many parents are already exercising choice over teaching methods by turning to for-profit companies like Gateway Learning Corporation, which produces Hooked on Phonics. Parents should also be able to have control over what method is used in the school their child attends. Unfortunately, under the current system, parents are subject to whatever curriculum the government has chosen—if the state or district adopts a particular curriculum or teaching method, most parents lack the means to send their child to an alternative school.

Accountability

> What kind of accountability are these corporate entities going to be under?[108]

Opponents of for-profit education often lament the difficulty of assessing academic quality in an education marketplace. But, as in any competitive industry, potential consumers will assess companies on the basis of their reputations and brands. The success of Kaplan, Inc., provides an example of the important role of a brand name in a market-based education industry. Kaplan is recognized worldwide as a provider of quality education services, particularly standardized test preparation services. Today the company offers myriad educational services including online test preparation, high school tutoring, child care, an online law school, employee training programs, and professional development; consulting on K–12 and postsecondary school "test readiness"; and guides, software, and more than 100 books on all aspects of

Some parents are undoubtedly more informed and active than others, but in a competitive market the least-informed consumer does not dictate the quality of available options.

education. Kaplan's reputation as an effective, efficient education company makes its expansion and continued success possible. However, to sustain its reputation, Kaplan will have to continue to provide quality service.[109] (See Appendix, Table A.6.)

Potential consumers will consider the reputation of for-profit education companies. If customers' expectations are not met, they will not purchase services from that provider again. Accreditation services will help consumers distinguish reputable education providers, and employers will judge whether or not a degree from a for-profit university signals a given set of skills. If employers conclude that employees with distance-learning degrees do not have the same level of training as do graduates of traditional four-year colleges, they will act accordingly. The marketplace is the most efficient and effective judge of value and check on quality.

Markets and Equity

> A market by definition can't address issues of equity. . . .[110]

Low-income students generally suffer the most under the current system and have the most to gain from a competitive education marketplace.

The argument that the poor will be left behind in an education marketplace presupposes that existing government schools take care of low-income children. Arguably, government schools have already left the poor "behind."

First, the argument that the poor will be left behind in an education marketplace presupposes that existing government schools take care of low-income children, yet studies show that the current system is failing to educate those children. Arguably, government schools have already left the poor "behind." The National Assessment of Educational Progress, a test of students in grades 4, 8, and 12, which is regularly administered by the Department of Education, has found that lower-income students generally do not perform as well as higher-income students. For example, in 1998 students eligible for the federally funded free or reduced-price lunch program, which is offered to children near or below the poverty line, had lower average reading scores in all three grades on the NAEP than did noneligible students.[111] Low-income students generally attend the worst government-run schools and have the fewest alternatives.

If the money that currently goes to government schools on a child's behalf were given directly to the parents, they would be able to use that money to pay for a school of their choice. Instead of taking low-income students for granted, schools would have an incentive to deliver quality services in order to keep their customers.

Such competition would also likely result in decreased tuition costs. Already, many private schools are offering education for less than the cost of a typical government-run school. For example, the average per pupil expenditure in public schools is roughly $7,000, compared to the average per pupil cost of $2,823 for Catholic elementary schools and $5,466 for Catholic secondary schools.[112] Furthermore, the activities of private charitable organizations like the Children's Scholarship Fund, which already distributes millions of dollars to help low-income families pay private school tuition, suggest that many individuals would be willing to donate money to help ensure that children from low-income families have access to a quality education.

Conclusion

The for-profit education marketplace provides us with a glimpse of what a thriving, competitive market for education might look like if the United States were to open the education sector to the forces of competition. In pursuit of consumers, for-profit education companies have found creative and cost-efficient solutions to education problems—for example, how to cure a speech impediment, to dramatically improve children's ability to read, and to provide educational opportunities for working adults.

The experience of the for-profit education industry suggests that a fully competitive education marketplace would differ from the current system in several important ways:

- Edupreneurs would likely open schools with a wide variety of curriculums, instructional methods, and philosophies of education in order to serve and satisfy a diverse customer base.
- Edupreneurs would invest in research on and development of new technologies to facilitate the education process.
- Higher education would become more accessible and affordable for people with lower incomes and those in the workforce.
- A customer-driven education system would weed out substandard schools and products more rapidly than does the current system.
- Edupreneurs would provide education services designed to prepare students to participate effectively in the new economy.

Policymakers interested in improving America's educational system should seek to eliminate financial biases against edupreneurs by adopting policies, such as tax cuts and universal tuition tax credits, that would return education purchasing power to individuals. Such policies would begin to loosen the government's monopoly on education and allow the natural growth of a vibrant education marketplace.

Policymakers should seek to eliminate financial biases against edupreneurs by adopting policies that would return education purchasing power to individuals.

Appendix:
For-Profit Education Providers

Table A.1
Edison Schools

Company history	H. Christopher Whittle, who previously created the first national electronic news system for middle and high schools in the United States, founded Edison in 1992. Edison opened its first school in 1995.[a]
Service description	Edison contracts with local school districts and the boards of charter schools to manage education in and the operations of K–12 schools. • Each family with a student in second grade or above receives a computer and a modem. Edison teaches parents, teachers, and students how to effectively use the computers. • Students spend approximately 28 percent more time in school each year than do students attending traditional public schools. • Elementary schools use a reading program developed at John Hopkins University and a mathematics program developed at the University of Chicago.
Market penetration	Edison serves approximately 38,000 students in 79 schools.
Results	• Edison schools that have operated long enough to generate trend data (generally two years) show generally favorable gains in test scores compared to the best available national measure of achievement trends, the National Assessment of Educational Progress.[b] • Edison's surveys show that parents with children in Edison schools are more satisfied with their schools than are parents of children attending regular public schools.[c]
Cost	Edison schools are supported by government funds on a per pupil basis. Parents do not pay tuition.

[a]See http://www.edisonschools.com.
[b]Edison Schools, "Prospectus," pp. 51–52.
[c]"According to a survey prepared for us by an independent market research firm for the 1997–1998 school year, covering all 20 of our schools then in operation, over 50 percent of the parents of our students gave our schools grades of A or A-. This compares to 37.2 percent of parents who give a grade of A or A- in U.S. public schools generally, according to the same market research firm." Ibid., p. 50.

Table A.2
National Heritage Academies

Company history	J. C. Huizenga founded National Heritage Academies in 1996. Huizenga wanted to provide his five-year-old son with a better education than that offered through a traditional government-run school.[a]
Service description	National Heritage Academies manages charter schools that focus on producing "good citizens" by emphasizing moral values and increasing parental involvement. • Parents must pledge to be involved with their child's development, and schools are equipped with "parent rooms" to make parents feel welcome. • The educational program is based on principles developed by Prof. Ronald R. Edmonds of Harvard University and Michigan State University. National Heritage Academies has a clear mission, sets high expectations for student achievement, and involves parents in their children's education. • National Heritage Academies' curriculum follows the Hirsch Core Knowledge Sequence.[b]
Market penetration	National Heritage Academies manages 22 charter schools in Michigan and North Carolina, serving approximately 8,000 students.
Results	• Over the past two years students have scored 35 percent above the national average on standardized tests. • A survey conducted by Wirthlin Worldwide of Grand Rapids, Michigan, on behalf of National Heritage Academies found that parents of its students are overwhelmingly satisfied with their children's education.
Cost	National Heritage Academies is fully supported by government funds on a per pupil basis. Parents do not pay tuition.

[a] Stanley Marshall, "Making Money in Schooling: Educators Turned Entrepreneurs," *Journal of the James Madison Institute*, no. 12 (Spring 2000): p. 25.

[b] The National Heritage Academies' Web site describes E. D. Hirsch as a national leader in education reform, whose work includes numerous books, including *Cultural Literacy* and *What Your 1st (2nd, 3rd, etc.) Grader Needs to Know*. Hirsch believes the educational system should be based on a standard body of knowledge that all children at a particular grade level should learn.

Table A.3
Scientific Learning Corporation

Company history	Scientific Learning was founded in 1996 to combine advances in brain research with technology in programs to facilitate learning and communication skills.[a]
Service description	Scientific Learning develops educational software, products, and services based on more than 25 years of brain research and field testing. • One product, Fast ForWord, improves language and reading skills of children aged 4 through 13 through "computer-controlled, repetitive training exercises that automatically adapt to each user's performance to modify the manner in which the brain processes language." The company is developing similar products for adults. • The company offers seminars on brain research and markets its products to educators and speech and language professionals.
Market penetration	Scientific Learning is currently focusing on the K–12 market in the United States but plans to expand to adults. The Web site states, "To date, tens of thousands of individuals have achieved gains of one to two years in language or reading skills with Scientific Learning's training programs."[b]
Results	Scientific Learning has tested and found significant benefits from their programs. In particular, the Fast ForWord program has been evaluated extensively. "On average, children with language and reading problems make language gains of 1.5 to 2 years after 4 to 8 weeks of Fast ForWord training."[c]
Cost	These programs are being used at schools and clinics and are also available to parents. For example, the home version of Reading Edge is available for $99, and prices for educator versions range from $129 to $1,459.

[a] See http://www.scientificlearning.com/info/index.php3?main=over&cartid= and http://www.scientificlearning.com/info/index.php3?main=history&cartid=.
[b] Ibid.
[c] Scientific Learning Corporation, "National Field Trial Results," p. 3, http://www.scientificlearning.com.

Table A.4
Advantage Learning Systems, Inc.

Company history	Advantage Learning Systems was founded in 1986.
Service description	Advantage Learning Systems provides learning information systems to K-12 schools in the United States and Canada. • Advantage Learning Systems' flagship product, Accelerated Reader, consists of computer-based multiple-choice tests on approximately 20,500 books appropriate to students in grades K-12. Similar programs in math and grammar are also available. • Some programs include a database that enables teachers to monitor each student's performance and compare it to national norms.
Market penetration	Advantage Learning Systems has sold products to 41,500 schools, or approximately 33 percent of the K-12 market.[a]
Results	Independent studies conducted on the company's behalf indicate that use of the Accelerated Reader improves standardized test performance in reading.[b]
Cost	Prices vary depending on the services purchased. For instance, the Accelerated Reader Starter Kit includes four disks with up to 200 quizzes and costs approximately $399. A Multi-User School License Kit for up to 200 students costs $1,499.[c]

[a] Advantage Learning Systems, Inc., "Annual Report," Securities and Exchange Commission Form 10-K, March 1, 1999, p. 1.
[b] Ibid., p. 3.
[c] Advantage Learning Systems, Inc., "Fall 1999 Catalogue."

Table A.5
DeVry, Inc.

Company history	DeVry was founded in 1931, at which time it offered courses in radio, television, and sound systems. Today DeVry is one of the largest publicly held, international, higher education companies.
Service description	DeVry offers undergraduate, graduate, and "lifelong" learning programs that are designed to provide career-oriented skills. DeVry offers bachelor's degrees in electronics engineering technology, computer information systems, telecommunications management, accounting, technical management, and business administration and an associate degree in electronics. • DeVry hires faculty with related professional experience, uses lab sessions with modern technologies, and runs classes that focus on "hands-on application" designed with input from representatives of leading companies. • Class schedules are flexible to meet the needs of adult students who work: courses are offered at night and during the summer so that a full-time student seeking a bachelor's degree can obtain one in three years; a part-time student can obtain one in five years.
Market penetration	DeVry Institutes are located on 16 campuses and serve nearly 38,000 full- and part-time students.
Results	DeVry offers an employment assistance program for its graduates and boasts that more than 90 percent of its graduates who pursue employment have a job within 180 days of graduation.
Cost	Tuition varies depending on the degree pursued; however, a typical semester costs about $4,200. The number of required semesters also varies depending on the degree; however, most degrees require eight semesters.*

*See http://www.devry.edu/f_admis_info.html.

Table A.6
Kaplan, Inc.

Company history	Kaplan, a wholly owned subsidiary of the Washington Post Company, has been offering standardized test preparation assistance for 60 years.
Service description	Kaplan has expanded its business to offer a multitude of educational services. • Kaplan offers test preparation over the Internet at www.kaptest.com. • SCORE! Prep, Kaplan's high school tutoring agency, assists students with academic subjects and in preparation for standardized tests such as the PSAT, SAT, ACT, and SAT IIs. • Kaplan's after-school educational centers, SCORE! Educational Centers, for K-10 students combine academics with a sports-oriented environment. Centers are staffed with "academic coaches," typically graduates of top universities.[a] • Kaplan's Concord University School of Law is the nation's first online law school. • KaplanCollege.com offers nearly 500 online professional development courses, courses that count toward degrees, and certification courses. • Kaplan offers employee training and educational services for employers as well as recruiting and job placement services. • Kaplan works directly with K-12 and postsecondary schools to improve standardized test results, offering professional development for teachers and advice on curriculums. • Kaplan's brand name is leveraged for publishing books and software on test preparation, admissions, and education.
Market penetration	Kaplan has served 3 million students in the last 60 years. Kaplan has approximately 1,200 classroom locations worldwide, including 27 centers in 18 countries outside North America.[b]
Results	A research report done on Kaplan's behalf found that the average score improvement was 120 points for all students who had taken Kaplan's SAT center-based course and 140 points for students who attended all classes and completed their homework. Almost 30 percent of students in Kaplan's SAT center-based courses improved by 170 points or more.[c]
Cost	Costs for Kaplan classes vary with the service provided; however, most courses cost roughly $800.[d] Costs of online services also vary but typically range from $300 to $500.[e]

[a] See http://www.aboutkaplan.com/.
[b] Ibid.
[c] Information provided by Katherine Engstrom, publicist at Kaplan, July 11, 2000.
[d] Estimate obtained from http://www.kaptest.com/view/enroll/area/1,2887,557-557,00.html.
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31. See http://www.heritageacademies.com/whynha_excellence.htm. Many factors may contribute to the high test scores of students at the National Heritage Academies. For example, it is likely that the parents of those students are highly committed to their children's education, which is likely to have a positive impact on student performance. It is also possible that the students attending National Heritage Academies come from families of above-average socioeconomic status. Student ability and prior education also influence student gains. Therefore, one cannot conclude that any student placed in a National Heritage Academies school would necessarily achieve those gains. However, the results suggest that National Heritage Academies schools are fulfilling their mission.

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